# IMPLEMENTATION OF THE WHOLE BRAIN TEACHING METHOD IN A THIRD GRADE FROM A PUBLIC SCHOOL IN PEREIRA, RISARALDA.

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LICENCIATURA EN LENGUA INGLESA

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Trabajo de grado presentado como requisito parcial para obtener el título de Licenciado en Lengua Inglesa

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#### **RESUMEN**

La finalidad de este proyecto fue observar las características del método llamado Whole Brain Teaching, creado por Chris Biffle (2010), en la enseñanza del inglés como lengua extranjera. El objetivo general de este proyecto fue describir la influencia que éste tuvo en la conducta de un grupo de estudiantes de tercer grado en una escuela pública de la ciudad de Pereira y como objetivos específicos: 1) ilustrar las percepciones de los estudiantes y de los profesores hacia la implementación del Whole Brain Teaching y 2) informar la influencia de Whole Brain Teaching en el comportamiento de los estudiantes.

Los resultados de esta investigación fueron considerados positivos en términos de comportamiento.

Por otra parte respecto al método Whole Brain Teaching, los estudiantes asimilaron todos los principios que WBT contiene, e internalizaron cada comando dando respuestas tanto físicas como verbales.

#### **ABSTRACT**

The purpose of this research was to observe the characteristics of the Whole Brain Teaching Method, created by Chris Biffle (2010), in the teaching process of English as a foreign language. The study had as general objective describing the influence of the principles of the Whole Brain Teaching Method on the behavior of students in the practice of teaching in a group of 3<sup>rd</sup> graders in a public school in Pereira. As specific objectives 1) to illustrate students' and teachers' perceptions towards the implementation of WBT, and 2) to inform the influence of WBT on students` behavior.

The results from this research were considered positive in terms of behavior.

Moreover, regarding to the Whole Brain Teaching Method, students assimilated all the principles that WBT contains and the students internalized each command, giving physical and verbal responses to each of them.

#### **ACKNOWLEDGMENTS**

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#### STATEMENT OF THE PROBLEM

Throughout time, different methods and approaches to teaching English have been used in the endeavor to adopt appropriate ways of teaching. These many methods and approaches take into consideration the way humans learn, the use of reinforcement, logic, repetition, and other elements. Some of these methods and approaches include the Direct Method, Grammar Translation Method, Task Based Teaching, Total Physical Response, Naturalistic Methods, Reading Based Approaches, Audiolingualism, Lexical Approach, and others (Harmer, 2011; Celce-Murcia, 1996).

Nevertheless, however modern or complete these methods and approaches could be, there is still a longing for finding other ways to learn another language. For this reason, the Direct Instruction Method, Cooperative Learning, Total Physical Response, Repetition, and Behaviorism, have been brought together with the intention to gather the essential elements needed when teaching and learning (Biffle, 2010).

Because of the researcher nature of the world of education, the Whole Brain Teaching Method (WBT) emerged as an alternative to instruction. This method proposed by Biffle (2010) engages children throughout the whole learning process by activating both brain hemispheres. The author continues to say that WBT draws on theories and methods (such

as Total Physical Response, Cooperative Learning, and Behaviorism), in order to create a method in which both hemispheres can work simultaneously when the essential principles of WBT -Class-Class, Teach-Ok, Mirror, Hands and eyes, and Scoreboard (p. 41-45) - are applied in the classroom, taking into account the use of imagination and fun. Besides, Whole Brain Teaching uses visualization and dramatization in order to develop comprehension. This method is relatively new; and it has been tested in mathematics, social studies, arts, dentistry, and also in kindergarten, inter alia (as can be seen on-line and in numerous videos and web-sites which talk about the benefits of WBT). Nevertheless, there is no evidence of the implementation of WBT in the teaching of English as a foreign language; this fact shows the need for experiencing WBT in more fields so as to construct knowledge in meaningful ways.

The fact that this new method has not been tested yet for language teaching creates the sense of doing it, especially because of the fact that it has been proven effective with other fields of the learning processes. Therefore, this study had as main purpose to describe and analyze the effects of WBT in a 3<sup>rd</sup> grade of a local institution on language teaching. The theories mentioned above were included in the study in order to describe the effects of them in the practice of teaching. In other words, the main focus of this research was to implement a new method not well known in the teaching of EFL context and to describe, analyze, and interpret the results. Such method is called Whole Brain Teaching, created by Chris Biffle in 1999.

## **RESEARCH QUESTIONS**

- 1. What is the influence of Whole Brain Teaching on the behavior of a group of 3<sup>rd</sup> graders at a public school in Pereira?
- 2. What is the impact of the Whole Brain Teaching principles on students' attention and behavior?

#### **GENERAL OBJECTIVE**

✓ To describe the influence of the Whole Brain Teaching principles on the behavior of students in the practice of teaching.

#### **SPECIFIC OBJECTIVES**

- ✓ To illustrate students' and teachers' perceptions towards the implementation of WBT.
  - ✓ To inform the influence of WBT on behavior.

#### LITERATURE REVIEW

"You're a teacher. Grow, learn, transform yourself, or die by ossification.

If you're afraid to try new teaching techniques, you are petrifying yourself to death"

### Chris Biffle

In the *Direct Method*, which took place during the 1800s and the early 1900s, teaching English consisted of emulating prototypes (the facilitator or a recording). This repetition had as main objective producing accurate outcome (Celce-Murcia, Brinton, and Goodwin, 1996). Furthermore, the Grammar Translation Method took into consideration the grammatical explanation given to students, who, then, were given examples to clarify the explanation. After this, they would translate these sentences to their native language and vice versa (Harmer, 2011). In addition, Suggestopedia empowers learning through positive suggestion, and proposes music as the main aspect of this method (Lozanov, 1970's). Also, Total Physical Response (TPR) proposed by Asher (1970) who states that TPR "...is a method of teaching language using physical movement to react to verbal input in order to reduce student inhibitions and lower their affective filter" (p.1). In addition, this method is used to improve learners' oral production. Furthermore, the Grammar Translation method can be mentioned, in which, according to Prator and Celce-Murcia (1979), one of the features is that the target language is taught most of the time in the mother tongue. Moreover, Audiolingualism started to encourage the use of drills as a way to learn the target language. The teacher would utter a sentence students were to repeat and then substitute a part of the sentence with a different word (ibid). On the other hand, a method in which the

teacher talk was limited was the *Silent Way*. The teacher would model sounds. Then, the teacher would just point and through gestures indicate whether the students were right or wrong. Finally, in the last decades, the Communicative Approach (which claims that the main purpose of learning a language is to communicate) took over English classrooms. This Approach suggests that students be involved in activities where the focus is on meaning and realistic communication (ibid).

Teaching English to young learners as a foreign language has been a task which has evolved throughout time due to the contribution of authors who have developed theories according to different views in order to reach the goal of engaging learners into the learning process. One of the methods that is based on teaching young learners is Whole Brain Teaching (WBT) proposed by Biffle (2010). He asserts that "Whole Brain Teaching (WBT) is a set of strategies that combines the best attributes of Direct Instruction and Cooperative Learning to create an engaging classroom environment for students and an enjoyable workday for teachers" (p.230, 231). This is how, through a guided range of activities learners are able to experience an innovative and updated class that goes beyond traditional classes. The author continues to say that this method has developed its groundings during the past four decades, and has its basis on different methods, techniques and theories that belong to WBT, such as: Cooperative Learning (CL) by Johnson & Johnson (1960), Total Physical Response (TPR) by Asher (1970), Repetition by Thornbury (1997), Behaviorism by Watson (1913), and Direct Instruction Method (DI) by Kousar (2009). These methods, techniques and theories have been the support of WBT which impacted teaching scenarios positively.

#### Behaviorism

The theories, methods and techniques that support WBT have been implemented at some point in an isolated way, but WBT combined them in order to have a successful method to teach young learners, adolescents and adults. One of the theories that support WBT is Behaviorism, introduced by Watson (1993), Crosbie-Brunett and Lewis (1913) and Thomas (1990) (cited in Stone, 1998), which states that behavior can be defined as observable events which are, by definition, sequences of stimulus-response. Also "the behaviorist theory of stimulus-response learning (...) considers all learning to be the establishment of habits as a result of reinforcement and reward" (Wilga Rivers, 1968, 73) Stone (1998) also claims that "contiguity between stimulus and response determined the likelihood that learning would occur." Adler (1920, cited in Stone, 1998) posited that the behavior of a person is motivated by the pursuing of goals. In addition, this author underlined that the perception, attitude, and the environment are crucial in influencing learners' behavior. Besides, Adler also argued that thoughts, feelings and behavior are the consequence of physical and social background. However, Behaviorism theory has been criticized due to the fact that behavior does not demonstrate the learner's existent knowledge, and mental activity and behavior cannot work separately which is one of the states this theory poses. Besides, learning is not a process in which only external factors should be taken into account, but also internal factors that can provide the improvement of learners.

Behaviorism can be evidenced in the WBT on the way it provides students with stimuli triggered by their response. For example, on the principle 5 students receive a reward every time they followed instructions.

#### Cooperative learning (CL)

To continue with the methods, techniques and theories that have supported the WBT method, Biffle (2010) affirms that "... Cooperative Learning (CL) involves student interaction as the basis for learning. Students solve pro

blems together, discuss ideas together, and complete practice together" (p.231) This means that through Cooperative learning students gather and support each other with the same aim; learning. Besides, Artz & Newman (1990), define Cooperative Learning as "small groups of learners working together as a team to solve a problem, complete a task, or accomplish a common goal" (p.448). Furthermore, according to Slavin (1994) "cooperative learning refers to a set of instructional methods in which students work in small mixed ability learning groups. The students in each group are responsible not only for learning the material being taught in class, but for helping their group mates learn" (p. 5) In the same fashion, Johnson & Johnson and Smith (1991) define cooperative learning as "the instructional use of small groups so that students work together to maximize their own and each other's learning..."(p. 2) Hence, students can share their knowledge with the learning group by interacting, sharing, solving problems and working as a team, which are some of the goals of WBT. Moreover, Millis (2000–2001, p. 4) points out that CL prevents bullying since learners work together in the classroom, and this fact makes learners feel safe,

and, also, their self-esteem improves. In addition, Millis ascertains that CL allows students to learn from them, and not just the experiences that the teacher provides; the classes become more dynamic, communicative and keep students awake and willing to share knowledge and perform tasks that are not able to make by themselves. The Cooperative Learning Method is clearly seen in the principle "Teach-Okay-Switch" from the WBT, for students help each other learn the topic of the lesson after the facilitator has taught it first.

#### Total Physical Response (TPR)

Physical Response (TPR). Asher (1988) states that TPR "...is a method of teaching language using physical movement to react to verbal input in order to reduce student inhibitions and lower their affective filter". This method, cited by Harmer (2011)- who asserts that once the instruction is clear, students can guide other classmates- has been implemented in teaching a second language and its results have been satisfactory.

Likewise, TPR is a method that relieves stress on both the student and the teacher. Larsen-Freeman (2000 p.113) states TPR as a method that reduces stress in a learner when learning a foreign language and since the student is not stressed, it is more likely that the student does not quit and continues with the process of learning a foreign language. Also "Learners act autcommands given by the teacher or their fellow pupils (at a later stage)..." cited by Mühren (2003: 1) The incorporation of TPR in WBT is evidenced when (during the principle "Mirror" where commands are used) the teacher performs an action and this is imitated by the learners.

#### Repetition

With respect to the other elements which are part of the WBT, it is apposite to mention Repetition proposed by Thornbury (1997) who claimed that repetition creates a cognitive effect (12), being one of the ways used by our minds to assimilate information. Polyakov and Solovyev (cited Merritt, 2012) asserts "that repetition facilitates rhythm and provides "catch-up" time, allowing longer periods of time for information to be processed" (p. 7). Besides, repetition increases the possibility of learning in young learners as stated by Biffle (2010), "the more you have repeated activities associated with a subject, the more interconnected are your neuronal dendrites." This means that the neuronal connections get stronger and more abundant with repetition. As a result, learning occurs.

#### Direct instruction (DI)

Another method, which completes the list of components of the WBT, is the Direct Instruction. According to Kousar (2009), Direct Instruction (DI) is a method that is focused on developing and designing lesson plans that help learning to be enhanced, and also in the development of tasks. It is also said that it is useful to avoid misinterpretations, due to the fact that instructions are given in a clear way and in a direct way. The sequence or mechanism of DI is:

- Inform the students of learning objectives.
- Activating their prerequisite knowledge.
- Explaining the new topic in small and sequential steps.

- Provide practice, along with immediate feedback.

- Supply the students with practice and homework.

This is the sequence of the way in which DI is necessary to be addressed. In the same

way, the WBT includes the DI in the Principle Hands and Eyes where students are eager to

receive instructions. These instructions are given in a clear and straightforward manner.

In the same way, the WBT includes the DI in the Principle Hands and Eyes where students

are eager to receive instructions. These instructions are given in a clear and straightforward

manner by using the principles of WBT; these principles are:

- Class -Class

- Hands and eyes

- Mirror

- Teach-Ok and Switch

- Scoreboard

These principles are explained in the session of Instructional Design.

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#### **METHODOLOGY**

*Type of study* 

Our study is classified as a qualitative case study since, according to Merriam (1988), for a research project to be qualified as a case study; it must have a boundary, which means that what is going to be studied is clearly defined. It also takes looking into a phenomenon in-depth to get a wide understanding of what is being observed. For these reasons, the study qualifies as a case study; the population and circumstances under which the phenomenon was studied were already limited. In addition, the time has been set, as well as the boundaries.

Also, the study is classified as a Qualitative research because the answer of a question is sought. In addition, a set of strategies/procedures will be used to reach this goal. Merriam (1988) defines "a qualitative case study as an intensive, holistic description and analysis of a single instance, phenomenon, or social unit." (p.21).Our study is a qualitative case study due to the fact that we are going to implement the WBT method to analyze and describe phenomenon in a narrow setting in order to describe the impact of Whole Brain Teaching on language teaching.

#### Context and settings

The research was conducted in a primary public school in Pereira, which is located in the north east area of the town; in a middle high class neighborhood. The population that attends the school is mainly students from lower class neighborhoods. The institution has 13 courses (of about 26 students per course) from 1<sup>st</sup> grade to 5<sup>th</sup> grade. The educational

activities of this public institution are aimed at students from assorted socioeconomic background. Nonetheless, since the school is located close to a skid row, most of the students who attend to this place come from low-income families. The institution has as mission the education of vulnerable young learners and adults. It also promotes values such as respect for others, responsibility, and honesty as tools to access to a better world. Furthermore, the vision of the institution has as goal the promotion of the humanistic, cognitive, and affective skills to construct a life project.

On the other hand, the school has tape recorders and a big classroom that has a TV and a DVD, which at the same time works as a library. The school also has a big play ground where they can do physical exercises and outdoors activities; and a back yard where students can do different activities. There is a teacher per classroom who teaches all the subjects including English.

#### **Participants**

The participants chosen for this study belong to 3<sup>rd</sup> grade in a primary school. There were twenty six students in the classroom and all of the students had and equal participation on the project. According to the CEFR, 3<sup>rd</sup> graders are required an A1 level in which they should be competent on basic vocabulary, and also they should be able to express simple sentences to make themselves understood. Their ages range from seven to eight years old.

#### Researchers' role

According to Adler and Adler (1994) our role in the research was as active members and participant as observer in which the researchers assume a functional role in addition to an

observational role. Since there were three researchers during the investigation, and the researchers in a qualitative study are totally immersed in the case, one of the researchers taught the lesson, the second researcher was the teacher's assistant, and the third researcher was in charge of the collection of the data.

#### Data collection

The methods for data collection implemented throughout the study are the following:

- ✓ Interviews: According to Dexter (1970) an interview is a "conversation with a purpose" where the researcher is willing to elicit helpful information. In the study, interviews were conducted at the end of the implementation. The interviews were performed in order to check the influence of WBT on students' behavior.
- ✓ Observations: According to Merriam (1998) "observation data gives a direct encounter of the phenomenon of interest" (...). In this research, observations were used in order to document the process with evidence, due to de fact that observations allow to record the incidents, behaviors and so on, to provide references points.
- ✓ Teacher and Researcher's Journals: According to (Powell, 1985, Bailey, 1990), the goals of journal writing are:

To record learners' experiences.

To help learners to be responsible for their own learning.

To encourage interaction among learners, learners with the facilitator and learners with other learners. That is why every lesson was recorded on the journals during each session. Key aspects and any relevant data from the students were also classified.

#### Data analysis

The analysis of data was conducted based on the Grounded theory; which is explained by Glaser and Strauss (1967) as a "research method in which the theory is developed from the data; rather than the other way around." Glaser and Strauss (1967) also state that the technique used in this theory is mainly a continuous comparison of the phenomenon; it is to conceptualize the data gathered through an organization of concepts or categories in which this information can be placed.

The study had a variety of methods to collect data, such as: interviews, teacher's journal, and observations. The interviews were done to the teacher and to a focus group at the end of the implementation of the research. The interview done to the focus group had approximately, from questions and probes, ninety eight questions. Each question and probe searched for answers regarding to the principles of the WBT method and their influence on students' behavior. The interview done to the teacher sought the perception towards the implementation of the WBT method on the 3<sup>rd</sup> grade course.

The teacher's journal was carried out by the researchers after each day of class. The main aspects observed during the sessions were written on the journal in a reflective way.

The observations were made by the researcher in charge of it in each class. Everything regarding the implementation of WBT (principles and rules) was observed. Once the implementation finished, the data gathered was divided into codes such as activities, WBT, and student's behavior. Once this stage was over, these codes were divided into groups so as to provide ease when working. From these codes, a deeper analysis was taken to group and categorize concepts that emerged from the data analysis, providing the findings.

#### INSTRUCTIONAL DESIGN

#### Theoretical foundations

The lessons were designed according to WBT parameters and all the theories, methods and techniques which relate to it. The first method that was used is TPR, in which movement is the main factor. The second method was repetition with which the learners were able to internalize information. Then, the proposal uses behaviorism since the researchers were in charge of only observing young learners behavior keeping aside mental activity. What is more, Cooperative Learning was also applied during the investigation when learners discussed ideas with their peers trying to develop language learning activities. Cooperative Learning was used to engage students and at the same time to encourage them to help their peers when in doubt. The combination of those methods and techniques gave the researchers the starting point in the application of the instructional design.

This research was conducted for four weeks. During the first week, students were presented with WBT rules and its principles; they were also familiarized with them since this was a key element for the development of the classes using WBT.

The lessons were designed according to WBT classroom rules which work to keep students organized and paying attention. According to Biffle (2010) the classroom rules have to be rehearsed at least once a day using their gestures given for each rule. The procedure to follow is that the teacher says the rule number and students repeat it, and then

they rehearse that specific rule. For example, the teacher says, "Rule 1" and the class respond "Rule 1: Follow directions quickly!" and make the Rule 1 gesture. This was done with each rule.

The classroom rules used in WBT are:

Rule 1: Follow directions quickly! Gesture: Students will move their arms and feet pretending they are running. This rule is used to save time, so students make things faster and they do not spend much time in activities like opening books, lining up and so on.

Rule 2: Raise your hand to speak. Gesture: Students will raise their hand, and then they will make a talking motion with their hand. This rule is used in class to keep order when students want to participate or have something to say.

Rule 3: Raise your hand to leave your seat. Gesture: Raise your hand and with your index and middle fingers make a walking figure. This rule is used in class in order to ask for permission to leave their seat.

Rule 4: Make smart choices. Gesture: Students will raise one hand and with their index finger they will tap their temple. This rule is used so students think twice before doing something wrong; for example calling each other's names, pulling each other's hair, or being disrespectful with their classmates and/or teachers.

Rule 5: Keep your dear teacher happy! Gesture: Using both hands framing a smiley face.

This rule is used to make sure that students will behave appropriately.

WBT also takes into account five principles (Class-class, hands and eyes, mirror, teachok, and the scoreboard) which are used to set boundaries in class; also as Biffle (2010) says "By rehearsing the rules several times a day, with gestures, you will engage whole brains in hearing, seeing, saying, doing and feeling the principles that create an orderly classroom" (p 119); these principles can be used at any time in the class; they are also interrelated with theories, techniques and methods used in WBT such as TPR, Behaviorism, and Cooperative learning.

The principles and theories are interrelated as follow:

#### **Principle 1: Class – class (Attention Getter)\***

This principle WBT is used to gain students attention; the teacher says "Class!" and the students respond "Yes!" The teacher can use various tones of voice.

Example: In our research we started the class by saying CLASS-CLASS, which is principle 1, and by having students responding YES. This was done in order to get students attention since they were distracted and we needed to start the class.

#### Principle 2: Hands and Eyes (The focuser)\*

This WBT principle is used when a big point needs to be drawn; the teacher makes use of this principle as often as it is needed during the sessions.

Example: In one of our sessions, one of us taught numbers from 13-19. This principle was used since the facilitator wanted to have students focused and raise awareness on the pronunciation of these numbers.

### **Principles 3: Mirror (The class unifier)\***

This principle is used to involve the students in any activity/task presented in class.

Example: After actions such as swim, jump, sleep and eat were introduced, one of us said the word "Mirror" and at the same time we performed one of the actions (swim, jump, sleep or eat). Next, students answered "Mirror" and then they started to mime the same actions performed by us. In the case of teaching actions, these actions could have been taught by one of their classmate as well.

This principle is related to TPR, as cited by Mühren (2003) "Learners act outcommands given by the teacher or their fellow pupils (at a later stage)....." (p. 1). This method involves reaction to verbal input.

# Principles 4: Teach – ok and switch (The Whole Brain Teaching activator and the Involver)\*

Once students have acquired the vocabulary presented, these WBT principles help them to exchange information with a partner during the sessions. First, students use Teach-Okay, which, according to Biffle (2010) "gives them the chance to use their energy to nourish their learning and their classmates' learning" (p. 118).

When students have used Teach-Ok, it is time to use the principle "Switch", which gives the opportunity to the other student to change roles, and this time to be the teacher.

Example: During the second week of implementing WBT students worked in pairs. The family members such as, mother, father, brother, sister, aunt, uncle, grandmother and grandfather were taught by one of us. Students worked in pairs and we told them that they had to teach each partner two of the family members using flashcards. Students pointed out to the family member to the student who was being taught. After that, one of us said "switch" and the students changed roles.

Teach – Ok and Switch principles are related to Cooperative Learning method since according to Johnson & Johnson (1999; cited in Johnson, Johnson, and Stanne, 2000) "Cooperative learning exists when students work together to accomplish shared learning goals". (p. 2)

#### **Principles 5: Scoreboard (The motivator)\***

This WBT principle helps students to improve their behavior due to the fact that their interest increases by receiving a reward for behaving appropriately. The reward can be chosen by the facilitator, it can be either a candy, extra-break time or according to the facilitator's criteria. In our case, we chose to reward students by giving them candies at the end of the week. Also, students had a reward song. Every time they did something well, related to the class activities, they sang "we did it, we did it, we did it..hurray!" They wiggled their hands to their left and to their right singing the song.

Example: During one of the weeks of implementing WBT in our research study, students received more positive than negative marks. On week one, most of the students received a candy and a happy rubber stamp in their notebook for participating and behaving well, also for saying and following the classroom rules. The following week, the participation as well as good behavior improved remarkably, this time when following the principles and classroom rules, or when we asked students to identify an action, they were active and motivated since they knew they will receive a reward at the end of the week.

This WBT principle is supported by the theory of Behaviorism, in which "the behaviorist theory of stimulus-response learning (...) considers all learning to be the establishment of habits as a result of reinforcement and reward" (Wilga Rivers, 1968, 73).

To implement WBT principles it is not necessary to have a sequence when using them, since the sequence can be interrupted due to students' behavior, facilitator's needs or the flow of the class. During the implementation of this method, reviewing the classroom rules was a key aspect of this research given that students tempted to forget them and break them. The implementation of both the classroom rules and principles were necessary in order to keep a safe learning environment.

<sup>\*</sup>Names given to each principle by Biffle (2010)

## **Lesson Plan**

The lesson plan below illustrates how one of the sessions included the principles as well as the classroom rules which are the main aspects of Whole Brain Teaching Method.

Comment
- The principle Class-Class is going to
be used since the facilitator needs to
get them focused for the next
activity.
The principle of hands and eyes will
be used since the facilitator will give
instructions to fulfill the activity
*Having this kind of questions will most
likely to get students out of control, so if
this happens, we will make use of the
principle Class-Class
- The principle Mirror will be used.
After the fac. mimes an action Ss

(Swimming, running, eating, singing, writing and jumping) will be shown to Ss. They'll first listen to the pronunciation and then, the facilitator will check if they identify the actions by not having a sequence showing them. After that, Ss will mime each action after the facilitator.

will do the same. Ex: If she jumps, she will start jumping and will say MIRROR and Ss will say MIRROR and start jumping and saying JUMP until the fac. says Ok.

- Depending on their performance,
   students will receive a happy face as a reward.
- The scoreboard principle will be used as stimulus to encourage their good performance.
- Small flashcards with the actions previously taught will be given to each student. After that, two students will be called to the front to have the activity performed (teach each other (taking turns) two of the actions from the flashcards) so the rest of the class will be aware how

The principles Teach-ok and Switch will be used.

Teach – Ok. This is to start miming and saying to his/her partner the actions (jump, eat and write) by showing the flashcard, when the facilitator says "Switch" Ss will change roles and do the same.

the activity will be done.

- Ss will do the same as the previous activity, but this time they will teach to his/her partner three different actions (swim, sing and write)
- To finish, the facilitator will tell Ss that she will mime an action and they will do the same, they will not only mime the action but at the same time students will say the name of each action performed by the facilitator.
- Teach Ok this to start miming and saying to his/her partner the actions
   (jump, eat and write) by showing the flashcard, when the facilitator says
   "Switch" Ss will change roles and do the same.

The facilitator will use the principle

MIRROR in order to review the

actions previously seen in class.

#### ETHICAL CONSIDERATIONS

In order to complete the study in a proper manner, a number of mechanisms were employed. A verbal agreement requesting permission to carry the study was conducted with the director of the primary school in order not to cause intrusion. In addition, the in-service teacher in charge of the third grade was orally explained the study, and she expressed interest for the study to be conducted.

In addition, the use of pseudonyms and other strategies to protect the school and members of it while collecting data, considering information, and writing of the document, were employed.

#### FINDINGS AND DISCUSSION

On this chapter, the results from analyzing data which are related to the influence that the principles of the WBT had on teaching are to be presented.

# 1. Students paid attention and behaved well during class through one of the principles of WBT: Class - Class

Class - class is a principle of WBT which helped the teacher get students' attention when they were talking to each other, or they were doing different things that were not related to the activity proposed, or also when all of them wanted to participate at the same time in a disorganized way. When this study started, students were talkative and they did not respect their classmates when they participated, they used to spend a lot of time doing other activities (doing homework from other subjects, drawing, talking to each other...) during the English class.

As this principle class-class was used during the sessions and as it was used using different tones of voice; students got involved in this way of calling their attention, and started to behave. Students answered Yes-Yes every time the teacher said class-class, and they stopped the activity they were doing in order to pay attention to the teacher and she let them realize what they were doing wrong directly (by calling them and making them aware of their behavior).

After this principle was used, students were attentive, behaving well, quiet and focused on the activity proposed by the teacher. Evidence supporting this finding will be presented.

The next data which supports this finding was taken from the interviews, observations and journals.

Observation chart	2.2
April 26 <sup>th</sup>	The facilitator is using the principle of WBT Class- Class several
	times to call Ss attention; most of them responded Class- Class,
	and they started to pay attention to what was said by the teacher.
	4.2
	Some Ss in the back are distracted, so the facilitator is using Class-
	Class principle to get their attention, and after that was done their
	behavior throughout the rest of the class improved.
	3.2
May 11th	The facilitator is using the principle of WBT "Class – Class" to
	which Ss answered Yes-Yes. It worked very well because they
	focused immediately and they recognized the principle Class-
	Class.

It can be seen how students responded in a positive way to the principle Class-Class.

This principle was proven to be an attention-getter, and also a behavior improver.

<u>Journal</u>	
April 19th	The use of the principle Class - Class was an effective way of getting
	students' attention since it was very helpful during this session

	because the Ss who were sitting in the back stopped talking and
	focused when the facilitator used this principle.
April 23rd	Today the facilitator used different tones of voice when saying "Class"
	- Class" in order to call students attention, the students followed the
	- Class III order to can students attention, the students followed the
	same dynamic of answering "Yes – Yes" with the same tone of voice
	the facilitator used, and the students got engaged and started to work
	in class by doing the activities proposed by the facilitator.

After using the principle Class-Class it was notorious that it was an effective way of catching student's attention and it also affected student's behavior towards a positive response.

Focal group <u>Interview</u>	SA: Cuando la profesora decía "Class-class" nosotros respondíamos "Yes-Yes" y nos quedábamos quietesitos y calladitos y mirábamos a la profe.
Teacher's <u>Interview</u>	Me pareció que la técnica que utilizaban ustedes para llamar la atención de los estudiantes realmente funcionó ehhh porque como ellos son tan habladores en clase y ustedes les decían algo y ahí mismo prestaban atención y el comportamiento de ellos mejoraba.

From this evidence, it can be seen that both students and the teacher were aware that this principle was used to call for students' attention, and also that students' behavior improvement goes along to this principle of WBT.

In accordance to this finding, Stone (1998) claimed that through behaviorism a series of stimulus-response occur and that the sequences of stimulus response might affect the possibility to which learning might take place. It was ascertained from the study that the use of the principle Class-Class, which consisted of triggering a reaction in students from what the teacher did, had an influence on the way students behaved in terms of attention to class.

# 2. WBT helped teachers to keep students behaving well, participative and attentive through one of its principles: Mirror

Mirror is a principle of WBT which kept students involved during the activities of miming or acting out, proposed by the teacher.

At the beginning of the study, students showed having a lot of energy which was not properly used. Students used to scream, move around the classroom, and having a disruptive behavior. To route this behavior this principle was used; the teacher proposed activities where all the students had to participate by miming or acting the teachers' or classmates' movements out.

During the introduction of the principle of WBT, mirror, students were attentive and participative since they were following the activity of miming the actions (swim, sleep, and write) proposed by the teacher, and after miming, students behaved well and they were

ready to continue with other activities (completing a word cross, coloring...) Evidence supporting this finding will be presented.

The next data which supports this finding was taken from the interviews, observations and journals.

<u>Journal</u>	Once this principle was introduced, the students wanted to
April 20 <sup>th</sup>	participate by going to the front of the classroom and be a model to
	their classmates and be followed when performing any activity, and
	after the miming time was over, it was notorious that all the students
	started to behave.
May 7 <sup>th</sup>	Students seemed to enjoy this principle since they went from being
	passive students to have an active role, and also by using the energy
	they have, in an appropriate way (teaching something to their
	classmates) which ended up on having students behaving well.

It was noted that the use of the principle "Mirror" helped students to be more attentive and participative throughout the classes which led to a behaved class.

Observation chart	Throughout the use of the principle, mirror, students were able to use
May 9 <sup>th</sup>	it. They know that every time it is said is because they have to follow
	the teacher's movements or one of their classmates too

The use of the principle "Mirror", showed how students were familiarized with the mechanism of this principle in which they must be attentive in order to mime what was being done in class either by the teacher or by a classmate.

Focus group	P: Y el de mirror? Se acuerdan? Que la profesora decía mirror uds
<u>Interview</u>	que tenían que hacer?
	SA: Ah si teacher yo me acuerdo que una vez usted me sacó a mí a
	hacer como que yo estaba nadando y yo tenía que decir mirror y
	todos los otros tenían que hacer lo mismo que yo.
	SH: Jay yo me acuerdo que un día yo tuve que salir allá y entrar
	al salón y haciendo así (moviendo las manos como comiendo) y
	luego mis amigos hicieron otras, entonces yo me senté y les puse
	cuidado.

It was evident that students were familiarized with the dynamic of the use of the principle "Mirror" and it also encouraged well behavior in order to pay attention to their peers.

The use of the principle Mirror is aligned to what Biffle (2010) asserts about the use of this WBT principle, where he claims that the more teachers involve students' whole brain it is most likely to have students focused and behaving well. This was evidenced in class when students performed the activity proposed by the teacher of miming actions (read,

dance, sleep, sing...), during this activity all of the students participated actively and after they finished repeating and mimic this actions the complete group was behaved and continued with the next activity without showing any disruptive behavior.

# 3. WBT helped students to work cooperatively and to participate actively through two of its principles: Teach-ok and Switch

Teach-ok and Switch are principles of WBT in which students work cooperatively to teach each other different subject matters. When teach – ok principle was used students played the teacher's role and they taught their partner something related to the topic explained by the teacher (actions, family members, numbers...) and once the word "switch" was said by the facilitator, students were ready to exchange roles.

At the beginning of the study students were distracted when the teacher talked for a long time explaining a topic.

After "teach – ok" and "switch" principles were introduced students were more engaged on the task. In addition, all of the students worked with their partners, and they participated actively on the sessions. Evidence supporting this finding will be presented.

The next data which supports this finding was taken from the interviews, the journals, and the observations.

Observation	13.1
<u>Chart</u>	In one of the activities (teaching numbers) while the teacher was
	monitoring, the teacher noticed that some of the couples were helping
	each other by correcting the mistakes done when teaching their
	partners since some of the students were confused with the
	pronunciation of two of the numbers (14,40)
May 9th	13.3
	Students were able to answer "ok" when they heard the word "teach".
	They also worked in pairs when they taught each other the actions (eat
	and swim) by using flashcards provided by the teacher. When the
	facilitator said "Switch" students answered "ok" and they switched
	roles.

It was evident that students worked cooperatively; they helped each other when needed.

Students were also aware of when to switch roles by using the principle "Switch". It also helped the teacher to have a more dynamic and participative class.

ıe él
éramos

SA: Era cuando nosotros le teníamos que enseñar los números al
compañero.

It could be marked that students raised awareness on the use of these two WBT principles "Teach-Ok" and "Switch" to teach each other supportively, and also students enjoyed playing the role as teachers.

This finding is aligned with the Cooperative Learning as proposed by Johnson & Johnson and Smith (1991), where students work together having the same aim. In addition, they continue to say that this labor provides students with a rich setting for education. This assertion was evidenced when students were working together teaching each other, helping each other.

### 4. WBT helped teachers give instructions and explanations to students through one of the principles of WBT: Hands and Eyes

Hands and eyes is a principle of WBT which is mainly used to have students focused when the teacher needs to explain either an activity, to give an explanation, or an announcement.

At the beginning of the process it was evidenced that students had difficulties to listen to the teacher when she was giving instructions.

Students were more engaged in class after this principle was introduced because every time the facilitator used the principle of WBT, hands and eyes, students were conscious that something important was about to be said and they focused on the facilitator. Also, they remained silent and had eye contact with her. Therefore, time was optimized. To support this finding, data will be introduced.

The next data which supports this finding was taken from the interviews, the journals, and the observations.

<u>Observation</u>	1.2
<u>chart</u>	
Monday, April	The facilitator used the principle of "Hands and eyes" in order to
23 <sup>rd</sup> #2	have Ss focused for the instructions of the next activity where the
	facilitator taught family members (sister, grandfather, father,
	brother, mother). Ss responded "hands and eyes".
	2.3
Tuesday, April 17 <sup>th</sup>	The students recognized the function of the principle "hands and eyes". Every time the teacher said hands and eyes the students responded by crossing their arms and looking at the teacher.

This principle (Hands and Eyes) was a useful tool for teachers to get students focused while giving instructions or explanations because students responded to the teacher's prompt and paid attention to what was going to be next.

<u>Journal</u>	1.2
April 30 <sup>th</sup>	The facilitator needed to explain the next activity, so the use of the
	principle hands and eyes was made in order to give instructions. The
	facilitator told Ss that by using flashcards they were going to repeat
	the classroom rules.
	1.3
May 9 <sup>th</sup>	At the beginning of the classes, it was sometimes frustrating trying to
	get Ss attentive for any explanation or to give instructions, but by
	using this principle often, it became an effective strategy to have Ss
	focused.

The use of this principle was proven an accurate way to catch students' attention. Once students were concentrated, the teacher proceeded to start the explanation, instruction, or clarification.

SD: Aahhh siii yo me acuerdo, cada que ustedes decían "hands and
eyes" nosotros decíamos "hands and eyes" y nos cruzábamos de
brazos y pues les poníamos cuidado.
SH: La teacher decía hands and eyes nosotros decíamos lo mismo y
las mirábamos.

By implementing the principle "Hands and eyes" students raised awareness on being attentive every time they heard it and they responded positively saying "hands and eyes".

The analyzed data suggests according to Kousar (2009), Direct Instruction (DI) is a method that is useful to avoid misinterpretations, due to the fact that instructions are given in a clear way and in a direct way. This was displayed during the study when the teacher made use of the principle Hands and Eyes where students seemed to be engaged to what was going to be said.

# 5. WBT helped students to increase interest in participating and behaving well in class through one of its principles: Scoreboard.

During the implementation of WBT, the students received a stimulus (a happy face or a reward song) as a response to their performance during the sessions, and at the end of the week the student(s) who fully met the requirements and behaved properly in class, received candy. The use of the stimulus-response included in the scoreboard helped students to have a positive reaction towards the sessions. This outcome will be supported through evidence taken from the interviews, the observations and the journals.

<u>Observation</u>	3.2
<u>chart</u>	
May 9 #1	The facilitator is using the Scoreboard principle since Ss had a good
	performance in class. Ss performed some actions (read, swim, write
	and dance). At the end of the activity and by their good performance,
	Ss sang the reward song and they got excited after singing the song.

	4.2
April 25 <sup>th</sup> #2	The facilitator is using the Scoreboard (punishment) principle since
	Ss are not behaving well in class. Because some of them are not
	participating and they are not paying attention.

The Scoreboard principle was decisive for boosting students' interest in the class. They wanted to be rewarded and to have the happy face, which led them to do an extra effort in class.

<u>Journal</u>	Every time the students accomplished something, they enjoyed
April 30 <sup>th</sup>	singing the song "we did it, we did it. We did hurry"
	During one of the last sessions, some of the students did not behave
May 8 <sup>th</sup>	well so he got a sad face and he approached to the teacher and told her
	that he was not going to give up, that he was going to behave and
	participate in order to be moved from the sad face to the happy face.

Scoreboard helped students increasing their motivation to participate and for the teacher was something positive since she had a participative classroom.

Focal group	SB: Cuando nos portábamos mal estábamos en la triste estábamos
Interview	muy, muy enojados y cuando nos portábamos bien en la feliz, feliz.
	Los niños participaban alegremente, sin nervios, contentos
Teacher's	participativos ehhh cogían los temas con esa alegría las esperaban a
	ustedes con ese entusiasmo sabían que tenían como es normal alguno
<u>Interview</u>	que otro molestaba pero ustedes sabían llegar a ellos con la
	motivación que ustedes les daban con la carita feliz o con la carita

triste la motivación que ustedes trajeron para ellos fue muy llamativa en había mucho interés en ellos ganarla en tener la carita feliz en llenar los cuadernos de carita feliz.

It was perceived that students seemed to be engaged in doing what the teachers said because they wanted to receive the happy face, which made them feel happy.

The support presented proposes that positive behavior towards following instructions can be strengthened through the Scoreboard principle, which consisted on rewards and punishments. This detection is connected to what Adler (1920) (cited in Stone 1998) identified from the behavior of a person. He found that behavior is affected by the pursuing of goals, and the surrounding events are key. In the study, it was ascertained that the fact that a student could have a happy face stamp (or that a song could be sung by the end of the class) was sufficient to have them doing the work proposed. Thanks to this, not only students worked to get a reward, but they, at the same time, were engaged on the task.

#### PEDAGOGICAL IMPLICATIONS

It is recommended to make use of this method because, in terms of behavior, it was not complex to have a focused class since students' participation was aligned with WBT rules. Students follow the respective parameters which help to manage the students, the class, and it also plays a main role towards teachers' perceptions, and motivation.

In addition, teachers' knowledge towards the use of WBT is of interest because this study implies that the teacher in charge of the class must know how to manage and how to apply WBT during the sessions in order to get positive outcome. It also shows that having a prior preparation before implementing WBT with the students is a key point for the success of it in the class.

Also, the students learn to listen to each other, and to be respectful to themselves and the others when working as a team because of the use of the rules and the principles of WBT that are related to cooperative work. Students comprehend all the rules and the principles of WBT, which allows them to work throughout the classes and the activities. What all this implies is that WBT has an impact on the humanistic side of learning.

Moreover, motivation increases due to the fact that students raise awareness on the results of having a scoreboard as a parameter to follow on the sessions.

Implementing WBT in the classroom is an effective method since it helps to control students' behavior. Behavior improvement can be better achieved by the inclusion of this method from the beginning of the school year since students need time to accommodate themselves to the rules and the principles related to WBT.

We recommend that the implementation of this method should be done every day for more than one month in order to get suitable results on the linguistic competence since the focus of the study was on behavior. What is more, the scoreboard is a crucial strategy to balance motivation in the class, and that is why it must be handled carefully due to the fact that if the students are receiving positive marks throughout the scoreboard; the attention and the participation can increase or the opposite might happen if they receive a negative mark where the participation of some of the students can decrease and that would end up in a whole misbehaving class. This is the reason why we recommend that the scoreboard should be used individually and taking into account the profile, and the personality of each student not lose one or some of the students' attention.

#### RESEARCH IMPLICATIONS

To future researchers, we recommend a deeper analysis of WBT in a wider time-span. It would be interesting to know what could happen if WBT were used for more months.

It would also be important to confirm or refute whether WBT teaching techniques have similar or different results in varied teaching contexts.

Because of the fact that the testing of the WBT method in EFL is relatively new, it is necessary to conduct more research studies in order to thoroughly describe the impact of this method at different levels (linguistic, motivation, and other relevant elements which are part of the process of learning a language).

Finally, it would be interesting to know what happens if WBT is used in a context where learners have a pre-intermediate proficiency of the language, and even with university students.

#### **CONCLUSIONS**

Based on this research it is apposite to say that children's behavior improves as well as their attention towards the English class during the process of implementing WBT. This method is useful for the teacher since it helps to get to the students easily due to the fact that they behave well and pay attention to the teacher.

Additionally, it can be concluded that the influence of Whole Brain Teaching on behavior is positive due to the fact that once the students get familiarized with all its principles, the students start behaving well during the sessions.

Another aspect under study of this research was the impact of the Whole Brain Teaching principles on students' attention and behavior which can also be perceived that once students recognize the principle that catches their attention "Class – Class" and "Hands and Eyes", students become more attentive and participative; their improvement on attention is clearly noticeable as well as the improvement on behavior.

By combining all the principles of Whole Brain Teaching, the effect on instruction and behavior is positive since the students from the beginning comprehend the dynamic of the principles proposed by WBT; for this reason giving instructions, announcements, commands and explanations to well behaved students are more beneficial for the teacher.

Finally, the behavioral focus affected students constructively as it was seen from the beginning of the implementation of our study in which the challenging students changed their behavior positively.

#### **LIMITATIONS**

One of the main limitations that were presented during the implementation of this research was the lack of studies that supported the effectiveness of Whole Brain Teaching to teach a foreign language. Different documents and comments supporting that WBT was effective were found, but all of them related to other areas of teaching such as, dentistry, social studies, mathematics among others. Those studies were conducted using English as a second or native language.

The influence of WBT on behavior was the aim in our study, but again, difficulties were found since the research was conducted when the school year had already started, and English classes with the in-service teacher were conducted in Spanish, so an extra effort was necessary to make ourselves understood since the only tools we had to do so were visual aids as well as body language because the study was conducted using English as the main language of instruction.

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#### **APPENDIXES**

#### Appendix 1

#### Focus Interview format

- 1. :¿Cómo te parecieron las clases de inglés? Qué fue lo que más les gustó de las clases de Inglés?
- 2. ¿Qué fue lo que te pareció bien?
- 3. las cinco reglas--¿Cuáles cinco reglas?
- 4. Ok Muy bien -- ¿y ustedes que piensan de eso, como les parecieron las clases de inglés?
- 5. ¿sí? ¿Por qué les parecieron bien?
- 6. ¿Si aprendieron mucho? Y que fue lo tanto que aprendiste?
- 7. Ok y ¿Qué recuerdan de esas clases de inglés, que es lo que más recuerdan?
- 8. ¿Ustedes no se acuerdan que era más lo que hacíamos aparte de la familia, los números...
- 9. Listo----y aparte de los juegos y de cantar que mas hacían?
- 10. Actions también hicimos Actions---- y ¿Cuándo hacíamos las actions a ustedes que les tocaba hacer?
- 11. Y ¿ustedes recuerdan como se llama cuando ustedes tenían que imitar lo que hacía la profesora?

- 12. Teach-Ok -- ¿Qué es eso de Teach-Ok?
- 13. Y ¿Lo hacían ustedes solos?
- 14. uhmmmm con un compañero --- Ya --- ¿Y qué nos pueden decir ustedes de la forma en que como las profesoras enseñaban?
- 15. y ¿Por qué bien?
- 16. Y ¿Qué es lo que saben?
- 17. siii y ¿Por qué enseñaban bien, que piensan ustedes?
- 18. si? Y la forma en cómo les enseñaban a ustedes? Como les decían que hicieran las cosas, ¿Qué piensan ustedes de eso?
- 19. De eso.... Y el de mirror? Se acuerdan? Que la profesora decía mirror uds que tenían que hacer? Y hands and eyes?
- 20. Entonces eso que le pareció?
- 21. Empecemos empecemos con el primero, coooon Class-Yes, cuando decíamos Claaaaasss
- 22. Que tenían que hacer? ¿Qué hacían?
- 23. Y cuando decían Class-Class
- 24. Y cuando las profes decían Teeeeach
- 25. Para que hacíamos eso?
- 26. Comenzar a qué?
- 27. Aja, que hacían, que hicieron con eso?

- 28. aahhh, y ¿les gustó eso?
- 29. Si aprendieron?
- 30. Teeeeach-ok
- 31. Que pasaba cuando eso?
- 32. y que es eso de Sshhhhh?
- 33. para qué?
- 34. Una cosa importe Ok
- 35. Y uds como se sentían cuando las profes ponían la carita triste y la carita feliz
- 36. Y porque estaban en la carita triste o porque en la carita feliz?
- 37. T: Como, como se sentían uds, como se sintieron cuando estaban en la carita triste o en la carita feliz, como se sentía?
- 38. ahhh entonces ud se portaba bien para que no lo castigaran?
- 39. Y que tal si les pregunto que piensan uds del comportamiento durante las clases de inglés? Uds creen que las caritas les ayudaron a mejorar?
- 40. Porque?
- 41. La carita feliz los hacía ganarse cosas?
- 42. La carita feliz los hacía ganarse cosas?
- 43. Cierto que si? Y eso como los hacía sentir?
- 44. Entonces uds mejoraron o no?
- 45. Si, trataron de estar mejor?
- 46. y cuando ustedes dejaron de comportarse así como groseros que les decían cosas a los compañeros pero cierto que si les ayudo o no les ayudo?
- 47. Si les ayudo?

- 48. Ahhhhh y en las notas?
- 49. Si les ayudo en la notas y en el comportamiento? Ustedes creen que mejoraron?
- 50. si...y la carita triste?
- 51. y que sentían?
- 52. les gustaban quedarse ahí?
- 53. pero les gustaba quedarse en la carita triste?
- 54. no? y que hacían para para para pasarse a la otra?
- 55. entonces el comportamiento siiiii si nos fue bien cierto?
- 56. ahhh bueno, y que tal que tal con lassssss con las reglas.... señor?
- 57. ustedes también saben, todos saben
- 58. pero ustedes si aprendieron cierto que si o no?
- 59. pero ustedes si aprendieron cierto que si o no?
- 60. Student B, comparando las clases de inglés con las enseñaban antes y las clases con nosotras tres que opinan ustedes de eso?
- 61. Que las clases como eran antes las clases de inglés antes que nosotras llegáramos?
- 62. Y con nosotras que creen ustedes que hay de diferencia en esas clases?
- 63. Por qué piensas tu que son más divertidas?
- 64. Y ustedes antes en la clase de antes ustedes trabajaban en parejitas?
- 65. No trabajaban en parejitas?
- 66. O sea que nosotros esta es la primera vez que ustedes trabajan en parejas y jugando y con todo se enseñaban los otros, si? Es la primera vez? Y como les pareció eso?
- 67. Y cuando ustedes se portaban mal con nosotras que eran lo que hacíamos?
- 68. Y luego se pasaban para la carita feliz y que pasaba, como era

- 69. Exacto entonces la manera en que nosotras enseñábamos si les gustó?
- 70. Si aprendieron más aprendieron menos lo mismo?
- 71. Si fue más divertido entonces?
- 72. Ok Entonces para resumir?
- 73. T: Se divirtieron?
- 74. Entonces vamos a resumir.... cada uno va a decir una cosita de lo que piensa de la clase de inglés con nosotras ---Ok por acá
- 75. Y de la manera que enseñábamos
- 76. se acuerda de la manera en que enseñábamos
- 77. Pero que se acuerda?
- 78. Y la forma como enseñábamos que les gusto que se les quedó?
- 79. La forma como enseñábamos no lo que enseñábamos si no como enseñábamos?
- 80. Los que se portaban bien que pasaba?
- 81. Y los que se portaban mal?
- 82. Solo a los que se portaban bien no?
- 83. Y niños y class
- 84. Y se acuerda de class yes
- 85. Cuál de esos se acuerdan?
- 86. Hands and eyes
- 87. Y cuál mas?
- 88. Hands and eyes
- 89. Teach-Ok
- 90. Class class class

- 91. Mirror, exacto mirror
- 92. Ustedes participaban mucho en la clase?
- 93. Ok niños muchas gracias

#### Appendix 2

#### Observation chart

This is the observation chart format which was used during the implementation of WBT where different aspects were taken into account. These aspects are related the objectives of the study.

May 9th

	Activity	WBT	Ss behavior	Comments
3	One of the principles of WBT "scoreboard" is being used by rewarding Ss, their names are being written on the happy face side	The facilitator is using the Scoreboard principle since Ss had a good performance in class. Ss performed some actions (read, swim, write and dance). At the end of the activity and by their good performance; Ss sang the reward song and they got excited after singing the song "we did it, we did it, we did it hooray"	At the beginning of the class, Ss were distracted but when the facilitator used principle 1 CLASS-CLASS, she immediately got most of Ss attention.  Ss were active and attentive during the performance of the actions, they followed classroom rules; they were aware of asking permission to speak by raising their hand.	3.4  Ss were motivated because they were going to receive a reward (a happy face) because they did well when miming some of the actions previously taught. They looked extremely motivated.

### April 20<sup>th</sup>/2012

	Activity	WBT	Ss behavior	Comments
1	The facilitator is using one of the principles of WBT in order to give instructions and prepare Ss for the activity (Hands and Eyes)	The facilitator is using "hands and eyes" principle by doing this, Ss will be prepared for the activity.  Most Ss are responding to the principle by saying "hands and eyes"	While the facilitator was giving instructions, Ss were very attentive, but once the facilitator finished giving instructions; Ss were dispersed and the facilitator lost their attention.	1.4

April 25<sup>th</sup>

	Activity	WBT	Ss behavior	Comments
	5.1	5.2	5.3	5.4
5	The facilitator is using two of the principles of WBT in order to call		Ss are responding well and participating, all of them are saying the rules and performing the corresponding	told that a happy face will be given if they all work, all of them

Ss attention	2. Raise your	movement	together
(Class-Class	hand to speak		
and hands and eyes)	3. Raise your hand to leave		
Ss are being	your sit		
asked to say the rules together and if they do so, the facilitator will remove the sad face and will put it in the happy face for participating	<ul><li>4. Make smart choices</li><li>5. Keep your dear teacher happy</li></ul>		

April 23<sup>rd</sup>

	Activity	WBT	Ss behavior	Comments
1	The facilitator is using one of the principles of WBT in order to give instructions and prepare Ss for the activity	The facilitator used the principle of "Hands and eyes" in order to have Ss focused for the instructions of the next activity where the facilitator taught family members (sister, grandfather, father, brother,	1.3  Since the fac. used class-yes and hands and eyes Ss were focused and attentive at on the facilitator's explanation.	1.4  Ss were engaged during the activity of repeating and recognizing the family members.
	(Class-Class	radioi, biodici,		

and hands	mother). Ss	
and eyes)	responded "hands	
,	and eyes".	
The family		
is being	Using the	
taught/revie	principle of hands	
w	and eyes was an	
	effective strategy	
	to grab Ss	
	attention	
	Using class-class	
	principle was an	
	effective strategy	
	to grab Ss	
	attention	

#### Appendix 3

Researcher's journal

At the end of each session, one of the researchers took advantage of what was possible to observe in the classes to write a reflective analysis which at the end of the research was helpful and was the support to compare and contrast the findings.